## REMARKS

### THE ALLOWABLE CLAIMS

Claims 3-9 were objected to as being dependent upon a rejected base claim, but were acknowledged to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3-6 have been rewritten in independent form to include the limitations of claims 1 and 2. Therefore, claims 3-6 are submitted to be in condition for allowance. Claims 7-8 depend from allowed claim 3 and claim 9 depends from claim 8. Thus, claims 7-9 are also submitted to be in condition for allowance.

### OBJECTION TO THE ABSTRACT

The abstract of the disclosure was objected to as exceeding the permissible limit of 150 words. Withdrawal of this objection is requested in view of the accompanying amendments to the abstract, which reduces the abstract to 143 words.

### REJOINDER IS REQUESTED AS TO CLAIMS 10-57

Claim 1 was deemed to be a generic claim (see Paper No. 7). Claim 1 has been incorporated into allowed claim 3. Therefore, rejoinder is requested as to non-elected claims 10-57 which depend from (at least) claim 3 and therefore include all of the limitations of generic claim 1. As previously noted, upon the allowance of a generic claim, applicant is entitled to consideration of claims to additional species which are written in dependent form or otherwise include all of the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141.

THE 35 U.S.C. § 102(A) REJECTION OVER PRATT, JR.

Claims 1, 2 and 91 were rejected under 35 U.S.C. § 102(a) as being anticipated by **Pratt, Jr.** Reconsideration is requested.

As noted above, claims 1 and 2 are cancelled herein without prejudice or disclaimer.

It is respectfully submitted that **Pratt, Jr.** does not identically teach a computer-readable medium bearing instructions enabling a computer having at least one processor to detect and analyze ground reaction forces produced by an animal to determine a physical condition of the animal, the instructions, when executed by a computer, causing the computer to carry out the step of, for example, "'comparing the calculated ground reaction forces corresponding to movement of the animal across the left floor plate and right floor plate, *including ground reaction forces arising from a corresponding contact of each fore and hind limb of the animal with a respective one of the left floor plate and the right floor plate*, to a range of forces indicative of at least one of a sound animal condition, an indeterminate animal condition, or a lame animal condition."

**Pratt, Jr.** instead provides a primary teaching of an array of force transducers arranged so that a human (or an animal) standing on the on the plates transmits forces to the plates through his legs, which permits calculation of body weight and, more significantly "forces that are internally generated such as the force ballistocardiogram, respiration, related forces and fetal movements, fetal heartbeat, and the like" (col. 6, lines 48-58). **Pratt, Jr.** teaches that subtraction of $F_1$ and $F_2$ from one another yields "the principle signals" of "posture control forces, respiratory forces, tremors, and involuntary muscular movements." (col. 6, lines 59-62).



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Although **Pratt, Jr.** discusses data obtained with the force plate systems inclusive of FIG. 10, which is said to a "foot step force vs. time trace for a man walking", such data is limited to a single heel strike spike (see col. 7, lines 58-68). **Pratt, Jr.** notably does not show, for example, comparing the calculated ground reaction forces corresponding to *movement of the human across a left floor plate and right floor plate, including ground reaction forces arising from a corresponding contact of each limb with a respective one of the left floor plate and the right floor plate*, to a range of forces indicative of at least one of a sound condition, an indeterminate condition, or a lame condition, as generally claimed. Thus, **Pratt, Jr.'s** assertion of applicability "of the present force plate system is to evaluate the soundness of the gait, particularly in athletes and race horses" (col. 8, lines 16-20) appears to be limited to evaluation of a single heel strike.

Accordingly, **Pratt, Jr.** does not identically teach each and every aspect of claim 91 and therefore does not anticipate claim 91. Withdrawal of this 35 U.S.C. § 102 rejection is requested.

**REJOINDER IS REQUESTED AS TO CLAIMS 92-96**

Claim was deemed to be a generic claim (see Paper No. 7). In view of the above-noted deficiencies in the asserted prima facie case of anticipation, it is submitted that claim 91 is patentable over the applied reference and rejoinder is requested as to non-elected claims 92-96, which depend from claim 91 and/or claims dependent therefrom and therefore include all of the limitations of generic claim 91. As previously noted, upon the allowance of a generic claim, applicant is entitled to consideration of claims to



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additional species which are written in dependent form or otherwise include all of the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141.

THE 35 U.S.C. § 103(A) REJECTION OVER PRATT, JR. AND TSUCHIYA ET AL.

Claims 58, 61, and 62 were rejected under 35 U.S.C. § 102(b) as being anticipated by **Pratt, Jr.** in view of **Tsuchiya et al.** (hereinafter "**Tsuchiya**").

Reconsideration is requested.

Further to the above-noted teachings of **Pratt, Jr., Tsuchiya** is alleged to disclose, *inter alia*, "a means for analyzing the balance of an animal utilizing force plates" and "constraining the animal to ensure the animal walks on the force plates". The Examiner alleges that "since both Pratt, Jr. and Tsuchiya et al both disclose using force plates to analyze a force associated with an animal's gait, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the [structure] and method of Pratt, Jr. to include the use of a constraining system, as per the teachings of Tsuchiya et al."

The Examiner acknowledges that **Tsuchiya** "discloses the use of a force plate for measuring the balance of a person" yet alleges that "it would have been obvious to one of ordinary skill in the art to recognize the force plate is still reacting to forces applied to it by the person, just as it would for an animal, and those forces can also be used to measure other variables associated with an animal's or person's gait".

Although a prior art device "may be capable of being modified to run the way the apparatus is claimed" obviousness under 35 U.S.C. § 103 requires that "there must be a suggestion or motivation in the reference to do so." See *In re Fritch*, 972 F.2d 1260

(Fed. Cir. 1992)(emphasis added). The Examiner must show reasons why a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). This showing must be clear and particular. See, e.g., *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements, standing alone, are not "evidence". *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578 (Fed. Cir. 1993).

The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999).

Instead, the factual inquiry whether to combine references must be "thorough and searching" and must be based on objective evidence of record. See *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52 (Fed. Cir. 2001); *In re Sang-Su Lee*, Case 00-1158 (Serial No. 07/631,240) (Fed. Cir. January 18, 2002); *see also In re Thrift*, Case 01-1445 (Serial No. 08/419,229(Fed. Cir. August 9, 2002).

"A showing of a suggestion, teaching, or motivation to combine the prior art reference is an 'essential component of an obviousness holding'" *Brown & Williamson Tobacco Corp. v. Phillip Morris, Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000); *quoting C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). The need for specificity pervades this authority. *In re Sang-Su Lee, supra, citing In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000)("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"). The factual question of motivation is material to patentability cannot be dispensed with by a generalized



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assertion. In *In re Sang-Su Lee*, *supra*, for example, the court admonished the Board of Patent Appeals and Interferences for failing to perform a "thorough and searching" factual inquiry in its reliance on the Examiner's "conclusory statements", emphasized that "determination of patentability must be based on evidence", and stated that the board "cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims". In view of the above requirements, it is submitted in accord with the following remarks that the Examiner's proffered motivation for combination of **Pratt, Jr.** and **Tsuchiya** is conclusory and legally insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a).

As an initial matter, **Tsuchiya** is utterly devoid of a teaching or suggestion of "a constraining system . . . for "constraining the animal to ensure the animal walks on the force plates" as alleged by the Examiner in numbered paragraph 6, page 4 of Paper No. 13. Instead, **Tsuchiya** teaches transverse bars 40, 41 which the human subject may grab onto if the subject loses his or her balance and is "unable to stand on his feet" (col. 2, lines 64-66). Nowhere does **Tsuchiya** reference transverse bars 40, 41 as serving to constrain the human subject to ensure the human subject walks on the force plates. The Examiner's attempt to bootstrap **Tsuchiya's** transverse bars 40, 41 into an alleged teaching or suggestion of "constraining the animal to ensure the animal walks on the force plates" (see numbered paragraph 6, second paragraph, page 4 of Paper No. 13) is completely unsupported by the teachings of **Tsuchiya**.

Accordingly, the proffered motivation for combination relied upon by the Examiner is factually flawed, conclusory and legally insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a).

As noted above, **Pratt, Jr.** does not teach (or suggest) application of the force plates (e.g., $IC_1$, $IC_2$) in the manner claimed to analyze the actual gait of an animal (as opposed to analysis of a single step or portion of a step). It is further submitted that **Tsuchiya** has absolutely nothing to do with analyzing gait. Instead, **Tsuchiya** provide "an apparatus for analyzing the human body's *balancing* function which is adapted to analyze the body load distributions of the person tested and display the analyzed results so as to enable the person tested to autonomously sense his balancing adjustability by means of visual feedbacks and obtain his own proper balancing ability" (col. 1, lines 29-36)(emphasis added). **Tsuchiya** provides an apparatus for analyzing the human body's balancing function "adapted to heteronymously disturb the balanced conditions of the person tested into an unbalanced one and make the person tested autonomously correct the unbalanced condition into a balanced one, and learn the feeling of this correction." (col. 1, lines 37-43).

In the **Tsuchiya** apparatus, "a pair of foot steps 11, 12, are provided, parallel with each other and keeping a proper distance between them", as shown in Fig. 2. The person being tested puts his right and left feet on a respective one of the foot steps to permit analysis of the person's body load distribution in the right and left directions (col. 2, lines 19-22). In other words, "the person tested gets on the foot steps 11 and 12 as shown in FIG. 2" (col. 2, lines 23-24). **Tsuchiya** requires that the subject - specifically a person - balance while standing on the foot steps 11, 12. **Tsuchiya** provide transverse bars 40, 41 "so that the person tested who gets on the foot steps 11 and 12 may hold them by his hands and thus assist the body balance maintenance force in case he is unable to stand on this feet." (col. 2, lines 62-66; see also col. 4, lines 46-49).

**Tsuchiya's** balancing apparatus therefore does not disclose or suggest, as alleged by the Examiner, "using force plates to analyze a force associated with an animal's gait" (see numbered paragraph 6, third paragraph, page 4 of Paper No. 13).

Accordingly, with respect to claim 58 and rejected claims 61, 62 depending therefrom, **Tsuchiya** does not teach (or suggest), either singly or in combination with **Pratt, Jr.**, a computer-based method for detecting and analyzing ground reaction forces produced by an animal, comprising the steps of: "guiding an animal to move across an instrumented force-sensing floor comprising a left floor plate and a right floor plate configured such that a length of each of the left floor plate and the right floor plate is selected to be greater than a distance traversed by the animal at a standard walking gait of the animal so that each limb of the animal contacts a respective one of the left floor plate and the right floor plate at least once . . . constraining at least one of the animal's lateral body movement and leg movement so that the animal's left limbs contact the left floor plate and the animal's right limbs contact the right floor plate as the animal moves across the force-sensing floor . . . calculating forces applied to the left floor plate and to the right floor plate . . . and comparing the calculated forces to a range of forces indicative of at least one of a sound animal condition, an indeterminate animal condition, or a lame animal condition, wherein said guiding step comprises guiding the animal so that each limb of the animal contacts a respective one of the left floor plate and the right floor plate at least once".

Accordingly, it is submitted that all of the claim limitations are not taught or suggested by **Tsuchiya** and/or **Pratt, Jr.**, as required by 35 U.S.C. § 103(a) (see, e.g., *In re Royka*, 490 F.2d 981 (CCPA 1974)). It is further submitted in view of the above that



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there is not, nor has there been shown, a suggestion or motivation in the references to combine the references to arrive at the claimed invention, as required by 35 U.S.C. § 103(a) (see, e.g., *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992)). In view of these deficiencies in the asserted *prima facie* conclusion of obviousness, withdrawal of this 35 U.S.C. § 103 rejection is requested.

**REJOINDER IS REQUESTED AS TO CLAIMS 60, 63-90**

Claim 58 was deemed to be generic claim (see Paper No. 7). In view of the above-noted deficiencies in the asserted *prima facie* case of obviousness, it is submitted that claim 58 is patentable over the applied reference and rejoinder is requested as to non-elected claims 60 and 63-90, which depend from claim 58 and/or dependent claims 61, 62, and therefore include all of the limitations of generic claim 58. As previously noted, upon the allowance of a generic claim, applicant is entitled to consideration of claims to additional species which are written in dependent form or otherwise include all of the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141.

**ALLOWANCE OF CLAIMS 3-96 IS REQUESTED**

In view of the amendments and remarks herein, it is submitted that the present claims patently define over the applied and the cited art, including the asserted combinations thereof. Allowance of claims 3-96 is requested.

Regarding the rejoinder of claims 10-57, 59, 60, 63-90 and 92-96, allowance is requested for these claims based at least upon the dependency of such claims from at least one of the generic claims 3, 58, and 91.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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